

Appl. No. 09/940,371
Amdt. dated April 25, 2005
Reply to Office Action of January 13, 2005

REMARKS

The following remarks are submitted in response to the Office Action mailed January 13, 2005. Claims 1, 2, 5-8, 10-19, 22-31, 34-37, 39-43, 45-47, 50-53, 55-58, 61-73, 87-89, 93-97, 125, 153 and 164 are pending and remain under consideration. Claims 1, 26, 28, 46, 87, 125, 153 and 164 have been amended. Support for the amendments is found in the specification, claims, and figures as originally filed. No new matter has been added. Reconsideration, reexamination and allowance of the pending claims are respectfully requested.

Claim Objections

Claim 26 is objected to as failing to further limit the subject matter of a previous claim. Claim 26 has been amended to depend from claim 25. Withdrawal of the objection is respectfully requested.

Claim Rejections under 35 U.S.C. § 112, second paragraph

Claims 93-95 are rejected as being indefinite for lack of antecedent basis for "the curved portion of the second segment." Claims 93-95 have been amended to depend from claim 89, which provides antecedent basis for the language in question. Withdrawal of the rejection is respectfully requested.

Claim Rejections under 35 U.S.C. § 103(a)

Claims 1, 2, 5, 8, 10-12, 15, 18, 19, 22, 25, 28, 29, 34, 37, 39, 40, 46, 47, 50, 53, 55, 58, 61, 65, 68, 71, 87-89, 93, 96, 97, 125, 153 and 164 are rejected as being unpatentable over Volz (US 5,755,743). Independent claims 1, 28, 46, 87, 125, 153 and 164 have been amended to recite that the first and second segments are coupled such that the insulating plates separate the conductive plates from the conductive surface or electrode. This is illustrated in FIG. 28. Applicants submit that Volz fails to teach or suggest such a device. In the device of Volz, even if one considers housing 10 and end cap 18 as the segments and conductive plates, and insulator 26 and silicone terminal fittings 16 as the insulating plates, the orientation of the plates differs from the device instantly claimed. In Volz, when the segments are coupled, the insulating plates 16, 26 are pressed together and do not separate the conductive plates 10, 18 from a conductive surface or electrode, as shown in FIGS. 1 and 5. Volz teaches the insulator 26 and fittings 16 as providing insulation for the feedthroughs 22 to separate them from the metal body 10. Thus, there would be no motivation for one to modify the device of Volz to put a conductive plate between the insulating layers.

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With respect to independent claims 1, 28, 46 and 164, the Examiner acknowledges that Volz fails to teach an electrically conductive surface or an electrode disposed on the housing, but asserts that it is well known in the art to provide an electrode on the housing, and thus it would have been obvious to modify Volz to include an electrode on the housing. Applicants respectfully traverse the rejection.

MPEP 2143, citing *In re Vaeck*, 20 USPQ2d 1438 (Fed. Cir. 1991), states that the first two requirements for a *prima facie* case of obviousness, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. MPEP 2143.01, citing *In re Mills*, 16 USPQ2d 1430 (Fed. Cir. 1990), states that the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. The Examiner appears to be asserting that the device of Volz could be modified to have an electrode on the housing because other devices have electrodes on housings; however, the Examiner has not provided any suggestion, reasoning, or guidance for why it would have been desirable for one of ordinary skill in the art to make such a change to the device of Volz. Volz specifically teaches an implantable unit with a contact arrangement for connection to an electrical or electronic device which is hermetically sealed in a housing. See column 1, lines 6-8. Volz also states that the device provides for "safe and reliable contact between the device accommodated in the housing and the cable set(s)." Emphasis added; see column 2, lines 34-36. Volz teaches "connection of the device accommodated in hermetically sealed housing 10 with actuator or sensor components 13, 15, shown likewise only as blocks, is effected via cable sets 12, 14." See column 4, lines 47-50. Volz discloses the generally metal housing body 10 is separated by insulator 24 from the feedthroughs 22 that provide contacts to the electronic device inside the housing. See column 5, lines 1-6.

Applicants submit that the entire disclosure of Volz is directed to an electrical device that is hermetically sealed inside a housing and is connected to sensors or actuators outside the housing by cables. There is no motivation for one of ordinary skill in the art, upon reading Volz, to modify the Volz device to have an electrode on the housing or make the bottom segment with a conductive plate. MPEP 2143.01, citing *In re Ratti*, 123 USPQ 349 (CCPA 1959), also states that "[i]f the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not

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sufficient to render the claims *prima facie* obvious." Applicants submit that modifying Volz to place an electrode on the housing would change the principle of operation of the Volz device. Volz is directed to a device that seals an electrical device inside a housing while providing sealed access for a cable connection to remote electrodes. Volz provides safe and reliable sealed contacts between the sealed housing a remote electrodes connected by cable sets. Because Volz is directed to sealing and insulating the contacts from the generally metal housing, placing an electrode on the housing of Volz would necessarily change the principle of operation of Volz's device.

The Examiner asserts that "it would have been obvious at the time the invention was made to modify the device of Volz to include an electrode disposed on the housing since it is well known in the art to do so." The Examiner also asserts that "it would have been obvious to one with ordinary skill in the art at the time the invention was made to form the bottom segment of the Volz device with a conductive plate." MPEP 2143.01 states

A statement that modifications of the prior art to meet the claimed invention would have been " 'well within the ordinary skill of the art at the time the claimed invention was made' " because the references relied upon teach that all aspects of the claimed invention were individually known in the art is not sufficient to establish a *prima facie* case of obviousness without some objective reason to combine the teachings of the references. Ex parte Levengood, 28 USPQ2d 1300 (Bd. Pat. App. & Inter. 1993).

The MPEP also cites *Al-Site Corp. v. VSI Int'l Inc.*, 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999) for stating that the level of skill in the art cannot be relied upon to provide the suggestion to combine references. The Examiner has not provided any reasoning as to why one would have been motivated to modify Volz to have an electrode on the housing or a conductive plate on the bottom segment. Applicants submit that the Examiner's statement that other references have electrodes on housings is not sufficient to provide a reason or suggestion for why one of ordinary skill in the art would have modified the specific device taught by Volz. Additionally, there is no motivation, suggestion, or guidance for one of ordinary skill in the art to modify the Volz device to have insulating plates separate conductive plates from a conductive surface or electrode, as is now recited in the claims.

MPEP 2144 states that the rationale to modify or combine the prior art may be expressly or impliedly contained in the prior art or it may be reasoned from knowledge generally available

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to one of ordinary skill in the art, established scientific principles, or legal precedent established by prior case law. Applicants submit that no rationale to modify Volz is found in the prior art, and the Examiner has not provided reasoning from knowledge generally available to one of ordinary skill in the art, established scientific principles, or legal precedent. The rejection thus is improper. Withdrawal of the rejection is respectfully requested.

Claims 8, 37, 53 and 125 recite a housing comprising a mixture of ceramic materials and titanium. Claims 87, 125, and 153 recite a housing comprising a mixture of conductive and nonconductive materials. The Examiner asserts that Volz shows the housing comprising a mixture of ceramic materials (24) and metal (10), or a mixture of conductive (10, 18) and nonconductive materials (16, 26). Applicants submit that one of ordinary skill in the art would not interpret the ceramic insulators 24 in the metal housing 10 of Volz or the metal housing 10 and the silicone fittings 16 as a "mixture." Volz discloses "feedthroughs 22 with a flat front side, which are separated by insulator 24, for example, ceramic, from the housing generally made of metal." See column 5, lines 2-4 and FIG. 1. Volz thus teaches the insulators 24 as separate parts of the device from the housing 10. Volz discloses "molding 26 of electrically insulated inelastic material, for example, of a polycarbonate, is attached" to housing 10. See column 5, lines 6-9 and FIG. 1. Volz teaches molding 26 attached to housing 10. Applicants submit that one of ordinary skill in the art would not interpret the disclosure of Volz as teaching a housing comprising a "mixture" of conductive and nonconductive materials.

The term "mixture" is used in the instant specification to refer to a composition in which ceramic materials are mixed with titanium, resulting in a substance that has a different color than just ceramic alone (see page 87, lines 3-9). MPEP 2111 states that the "PTO applies to verbiage of the proposed claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art" (emphasis added). Applicants submit that one of ordinary skill in the art, upon reading the instant specification, would not interpret the ceramic insulators inserted into the metal housing of Volz as a housing comprising a "mixture" of ceramic materials and metal. Volz does not teach or suggest a housing comprising a "mixture" of ceramic materials and titanium as is recited in claims 8, 37 and 53.

Claim 25 recites an implantable cardioverter-defibrillator wherein the electrically conductive surface of the housing emits an energy for shocking the patient's heart. The Examiner asserts that Volz shows the electrical circuit can emit energy for shocking the patient's

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heart. The portion of Volz relied on by the Examiner, column 1, lines 17-18, is a description of the related art and merely states that implantable plug-and-socket connections are used in cardiac pacemakers, defibrillators and cardioverters. Volz does not teach or suggest a conductive surface of the housing as emitting energy for shocking a patient's heart, as is recited in claim 25.

Claims 1, 2, 5, 8, 10-12, 15, 18, 19, 22, 25-31, 34, 37, 39, 40, 43, 45-47, 50, 53, 55, 58, 61, 62, 65-68, 71-73, 87-89, 93, 96, 97, 125, 153 and 164 are rejected as being unpatentable over Volz in view of Hauser (US 5,385,574). The Examiner acknowledges that Volz does not teach an electrically conductive surface on the housing, but asserts that because Hauser shows an electrode on a housing, it would have been obvious to modify Volz to have an electrode on the surface to defibrillate the heart. Applicants respectfully traverse the rejection. Volz fails to teach the basic elements of the claims, as amended, for the reasons set forth above. Hauser does not provide what Volz lacks.

Volz teaches a device for hermetically sealing an electrical device having leads connected to sensors or actuators. The entire disclosure of Volz is directed to insulating the lead connections from the metal housing. Applicant submits that the fact that Hauser discloses a pulse generator housing with an electrode on the housing surface does not provide motivation or guidance for one of ordinary skill in the art to modify the device of Volz to include an electrode on the housing surface. Further, even if one were to combine the teachings of Volz and Hauser, one would not achieve the claimed invention. The independent claims, as amended, recite the insulating plates separate the conductive plates from the conductive surface or electrode when the segments are coupled. Hauser provides no motivation, suggestion or guidance for separating the conductive regions of Volz (housing) from an electrode with insulating plates. Additionally, Hauser does not teach or suggest a housing comprising a mixture of ceramic materials and titanium or a mixture of conductive and nonconductive materials. Neither Volz nor Hauser, either alone or in combination, teach or suggest the elements of the independent claims or the claims dependent thereon. Withdrawal of the rejection is respectfully requested.

Claims 6, 7, 35, 36, 51 and 52 are rejected as being unpatentable over Volz as applied to claims 5, 34 and 50 above, and further in view of Mech et al. (2002/0120296). Claims 6, 7, 35, 36, 51 and 52 are rejected as being unpatentable over Volz in view of Hauser as applied to claims 5, 34 and 50 above, and further in view of Mech et al. Volz and Hauser fail to teach or suggest the basic elements of independent claims 1, 28, and 46 for the reasons set forth above.

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Mech et al. fail to provide what Volz and Hauser lack, thus any combinations of Volz, Hauser, and Mech et al. also fail to teach or suggest the elements of the claims. Withdrawal of the rejections is respectfully requested.

Claims 13, 14, 15-17, 41, 42, 56, 57, 62-64, 94 and 95 are rejected as being unpatentable over Volz. Claims 13, 14, 15-17, 41, 42, 56, 57, 62-64, 94 and 95 are rejected as being unpatentable over Volz in view of Hauser. Volz and Hauser fail to teach or suggest the elements of independent claims 1, 28, 46 and 87 for the reasons set forth above, and thus also fail to render the claims dependent therefrom obvious. Withdrawal of the rejections is respectfully requested.

Claims 23, 24, 45, 69 and 70 are rejected as being unpatentable over Volz as applied to claims 1, 22, 28, 46 and 68 above, and further in view of Mower (US 5,871,506). Claims 23, 24, 45, 69 and 70 are rejected as being unpatentable over Volz in view of Hauser as applied to claims 1, 22, 28, 46 and 68 above, and further in view of Mower. Volz and Hauser fail to teach or suggest the basic elements of independent claims 1, 28 and 46 for the reasons set forth above. Mower fails to provide what Volz and Hauser lack; thus any combinations of Volz, Hauser, and Mower also fail to teach or suggest the elements of the claims. Withdrawal of the rejections is respectfully requested.


Reexamination and reconsideration are respectfully requested. It is respectfully submitted that all pending claims are now in condition for allowance. Issuance of a Notice of Allowance in due course is requested. If a telephone conference might be of assistance, please contact the undersigned attorney at (612) 677-9050.

Respectfully submitted,

Gust H. Bardy et al.

By their Attorney,

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